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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/185,070	11/03/98	MEIRZON	T 01706.0037

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EXAMINER

LE, L

ART UNIT	PAPER NUMBER
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2749

DATE MAILED: 08/08/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
09/185,070

Applicant(s)
Meirzon et al.

Examiner
Lana Le

Group Art Unit
2749



☐ Responsive to communication(s) filed on _____.

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 1-16 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1-16 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved; ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____.

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 13 and 14 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The first sentence of claims 13 and 14 "a method according to claim 11 and further comprising providing a full power supply..." should be changed to "a method according to claim 11 and further comprising providing a less than full power supply..."

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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4. Claims 1- 4, 7-12, 15 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Soleimani et al (US 5,678,228).

Regarding claim 1, Soleimani et al discloses a VSAT terminal comprising an antenna 12 (see Fig. 2 and hereafter); a microwave power amplifier 28, a microwave low noise amplifier in the receiver chain 80; a transmitter 20 coupled via the power amplifier to the antenna; a receiver 80 coupled via the microwave low noise amplifier to the antenna; a user VSAT interface 16; and a controller 45 in communication with the user VSAT interface and in electrical connection with the power amplifier and the low noise amplifier for supplying power thereto, the controller being functional to dispense a less-than-full electrical power supply to either of the amplifiers when there is no communication session and functional to dispense a full electrical power supply to either of the amplifiers in the presence of a communication period (col 4, lines 25-35).

Regarding claim 2, it is rejected as set forth in claim 1, wherein Soleimani et al further presents that the controller is controlled to react when the user VSAT interface send out a signal by providing electrical power to the power amplifier (col 4, lines 15-20).

Regarding claim 3, it is rejected as set forth in claim 1, wherein Soleimani et al further discloses that the controller is controlled to react when the user VSAT interface send out a signal for providing electrical power to the low noise amplifier (col 6, lines 55-67).

Regarding claim 4, it is rejected as set forth in claim 1, wherein Soleimani et al further discloses that the controller dispenses a less than full power supply to the low noise amplifier and the microwave power amplifier when there is no communication signal (col 4, lines 63-67, col 5,

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lines 1-5) and wherein the controller is controlled to react when the user VSAT interface sends out a signal by providing a full power supply to the low noise amplifier and the power amplifier (col 4, lines 60-63, col 4, lines 20-25).

Regarding claim 7, Soleimani et al further discloses that the controller is functional to turn down the electrical power supply to either of the amplifiers after a predetermined period of inactivity by the user VSAT interface (col 4, lines 59-67).

Regarding claim 8, Soleimani et al further discloses that the controller is functional to turn down the electrical power supply to either of the amplifiers after a predetermined period of inactivity of the microwave low noise amplifier (col 5, lines 10-13).

Regarding claim 9, Soleimani et al further discloses that the controller operates in accordance with a predetermined power control scheme for providing electrical power to the microwave power amplifier (col 4, lines 42-53).

Regarding claim 10, Soleimani et al also reveals a VSAT telecommunication network 10 (Fig 1) comprising at least one satellite 4, and a plurality of VSAT terminals 6 talking with the communication satellite, wherein at least one of the VSAT terminals comprises an antenna 12 (see Fig. 2 and hereafter); a microwave power amplifier 28, a microwave low noise amplifier in the receiver chain 80; a transmitter 20 coupled via the power amplifier to the antenna; a receiver 80 coupled via the microwave low noise amplifier to the antenna; a user VSAT interface 16; and a controller 45 in communication with the user VSAT interface and in electrical connection with the power amplifier and the low noise amplifier for supplying power thereto, the controller being

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functional to dispense a less than full electrical power supply to either of the amplifiers when there is no communication session and functional to dispense a full electrical power supply to either of the amplifiers in the presence of a communication period (col 4, lines 25-35).

Regarding claim 11, Soleimani et al presents a method for managing power consumption in a VSAT terminal having an antenna 12 (see Fig. 2 and hereafter); a microwave power amplifier 28, a microwave low noise amplifier in the receiver chain 80; a transmitter 20 coupled via the power amplifier to the antenna; a receiver 80 coupled via the microwave low noise amplifier to the antenna; a user VSAT interface 16; and a controller 45 in communication with the user VSAT interface, the power amplifier, and the low noise amplifier, the method comprising of dispensing a less than full electrical power supply to either of the amplifiers when there is no communication period (col 5, lines 11-19); and dispensing a full electrical power supply to either of the amplifiers in the presence of a communication period (col 4, lines 25-35).

Regarding claim 12, Soleimani et al further discloses that the method according to claim 11 wherein the step of dispensing a less than full electrical power supply comprises dispensing a less than full power supply to the microwave low noise amplifier and the microwave power amplifier when there is no communication present (col 4, lines 63-67 and col 5, lines 1-5) and wherein the dispensing a full electrical power supply step comprises providing a full electrical power supply to the microwave low noise amplifier and the microwave power amplifier in response to operation of the user VSAT interface (col 4, lines 20-25 and col 4, lines 60-63).

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Regarding claim 15, Soleimani et al further discloses a method according to claim 11 and wherein the dispensing a less than full electrical power supply step comprises providing a less than full supply to either of the amplifiers after a predetermined period of inactivity of the user VSAT interface (col 4, lines 59-67).

Regarding claim 16, Soleimani et al further discloses a method according to claim 11 and wherein the dispensing a less than full power supply to either of the amplifiers after a predetermined period of inactivity by the microwave low noise amplifier (col 5, lines 10-13).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Soleimani et al (US 5,678, 228) in view of Dent et al (US 5,471,655).

Regarding claim 5, Soleimani et al teaches a VSAT terminal according to claim 1, wherein Soleimani et al also discloses that the controller is functional to the user VSAT interface's operation by dispensing max electrical power supply to the low noise amplifier and the power amplifier (col 3, lines 57-col 4 line 4). However, Soleimani et al didn't specifically teach that in the absence of a communication period or while in standby mode, the receiver is still turned on,

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wherein the controller provides a less-than full power supply to the microwave power amplifier when there is no communication. Dent et al stated that it is well known in the art that only the receiver is operating when the transmitter is off during the time between conversations or between any interaction of the user interface or the receiver, the receiver is consuming power (col 3, lines 12-17). It would have been obvious to one of ordinary skill in the art at the time the invention was made to add the teaching of Dent et al to Soleimani et al in order to particularly save power on one unit while the other is left on to wait for or receive periodic incoming signals.

Regarding claim 6, Soleimani et al discloses a VSAT terminal according to claim 1, wherein the controller is responsive to receipt of an incoming transmission via the microwave low noise amplifier for dispensing a maximum electrical power supply to the low noise amplifier and the power amplifier, since Soleimani stated that the receiver chain comprising the low noise amplifier (col 6, lines 57-60) receives communication signals at regular predefined intervals in synchronization with the transmission from the central hub station (col 5, lines 25- 30). However, Soleimani et al didn't specifically teach that in the absence of a communication period or while in standby mode, the receiver is still turned on, wherein the controller supplies a low power supply to the microwave power amplifier and a full power supply to the microwave low noise amplifier in the absense of a communication period. Dent et al stated that it is well known in the art that only the receiver is operating when the transmitter is off during the time between conversations or any interaction of the transmitter or receiver, the receiver is consuming power (col 3, lines 12-17). It would have been obvious to one of ordinary skill in the art at the time the invention was made to

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add the teaching of Dent et al to Soleimani et al in order to particularly save power on one unit while the other is left on to wait for or receive periodic incoming signals.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

-Hirschfield et al (US 5,826,170), Satellite Communication Power Management System.

-Davis et al (US 5,640,691), Power Controller for RF Transmitters

-Wiedeman et al (US 6,064,857), Dual Mode Satellite Telephone with Hybrid

Battery/Capacitor Power Supply

-Grubb et al (US 5,768,684), Method and Apparatus for Bidirectional Power Control in a Digital Communication System.

8. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 305-9501 (for formal communications intended for entry)

or:

(703) 305-9508 (for informal or draft communications, please label

“PROPOSED” or “DRAFT”

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Hand-delivered responses should be brought to the Crystal Park II, 2021 Crystal Drive,
Arlington VA, Sixth Floor (Receptionist).

Any inquiry concerning this communication or communications from the examiner should
be directed to Lana Le whose telephone number is (703) 308-5836 and to the supervisory patent
examiner Daniel Hunter whose telephone number is (703) 308-6732.

Any inquiry of a general nature or relating to the status of this application should be
directed to the Group receptionist whose telephone number is (703) 305-3900.

With Regards,

Lana Le

July 26, 2000


DANIEL S. HUNTER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2700